



U.S. Fish & Wildlife Service

FY 05 Alpena FRO Accomplishment Summary

Partnerships and Accountability

Partnerships are essential for effective fisheries conservation. Many agencies, organizations, and private individuals are involved in fisheries conservation and management, but no one can do it alone. Together, these stakeholders combine efforts and expertise to tackle challenges facing fisheries conservation. The success of these partnerships will depend on strong, two-way communications and accountability. The Alpena Fishery Resources Office in Alpena, Michigan provides fishery conservation in cooperation with many partners. The accomplishments listed below provide examples of some of the partnerships that were established to meet fishery and habitat related goals in Fiscal Year 2005.

Service Biologist Gives Presentation at CLC SCAA



*Submitted by Aaron Woldt
Fishery Biologist*

Fishery Biologist Aaron Woldt of the Alpena FRO attended the Great Lakes Fishery Commission October 2004 Council of Lake Committees Meeting on October 19 in Romulus, Michigan. Woldt delivered a “Statistical Catch at Age (SCAA) Model Evaluation Techniques” presentation during a SCAA Analysis Workshop for fisheries managers. The workshop included 9 presentations from a panel of experts, and the goal of the workshop was to give fisheries managers a better understanding of SCAA techniques and procedures, staffing needs, data needs, model assumptions, model limitations, model results, and model evaluation techniques. Case studies of current SCAA applications in the Great Lakes like 1836 Treaty Waters lake trout and lake whitefish and southern Lake Michigan yellow perch were also discussed.

Woldt’s talk, co-authored by Mark Ebener, covered evaluation techniques such as comparing observed parameter values versus model predicted estimates, examination of model generated standard deviation estimates of parameters, model sensitivity to changes in initial parameter values, plots of model estimated parameter residuals, Markov Chain Monte Carlo simulations, retrospective analyses, and biological intuition.

Personnel from state, federal, provincial, and tribal fisheries management agencies throughout the Great Lakes attended the workshop. After the workshop, participants said the presentations were extremely helpful and gave them a good, basic understanding of SCAA that would allow them to better communicate modeling results (e.g. harvest quotas) and resource implications (e.g. trends in standing stock biomass) to staff members and stake holders.

Participation in multi-agency, management technique oriented workshops is consistent with the Service's goals of supporting collaborative approaches to manage interjurisdictional fish populations at self-sustaining levels under the "Aquatic Species Conservation and Management" priority of the Fisheries Program Vision for the Future and is an example of maintaining open, interactive communication between the Fisheries Program and its partners under the "Partnerships and Accountability" priority of the Vision.

Stakeholder Meetings Held Regarding St. Marys River Fishery



*Submitted by Anjanette Bowen
Fishery Biologist*

The St. Marys River Fishery Task Group (SMRFTG) held stakeholder meetings in late October 2004 to educate the public about coordinated activities conducted by the group to assess harvest and fish community in the St. Marys River and future tasks of the SMRFTG. The meetings were held at the Lake Superior State University Cisler Center in Sault Ste. Marie, Michigan and at the Sault College of Applied Arts and Technology in Sault Ste. Marie, Ontario.

PowerPoint presentations were provided by the Michigan DNR on behalf of the group summarizing the assessment projects. The USDA Wildlife Services Unit from Gaylord, MI was invited by the group to provide a presentation on their cormorant control activities in Northern Lake Huron and the St. Marys River at the Michigan meeting.

Ten people attended the Michigan meeting and thirteen people attended the Ontario meeting. News interviews were conducted by the Sault Evening News in Michigan and the Sault Star and EZRock/Q104 in Ontario. Alpena FRO and other task group members including the Ontario Ministry of Natural Resources, Michigan DNR, Chippewa Ottawa Resource Authority, Bay Mills Indian Community, Lake Superior State University, Department of Fisheries and Oceans Canada, and Sault College of Applied Arts and Technology took part in the meeting.

The SMRFTG is a multi-agency and multi-national group that was established in 1997 by the Great Lakes Fishery Commission's Lake Huron Committee to develop a coordinated assessment and review program for the St. Marys River fish community and its associated habitats. Anjanette Bowen of the Alpena FRO currently chairs the group. A number of joint projects have been accomplished by the group that have provided an improved knowledge base of the fish and fishery in the St. Marys River. Several of the reports have been published and are posted on the Great Lakes Fishery Commission web site (<http://www.glfc.org/lakecom/lhc/lhchome.asp#pub>).

Partnerships between management agencies within the St. Marys River Fishery Task Group and stakeholders on the St. Marys River are necessary to protecting and managing the fishery of the

river. Partnerships in aquatic resource protection and management are an important component of the "Partnership and Accountability" priority of the Fisheries Program's Vision for the Future.

Ohio Fish Passage Opportunities Discussed



*Submitted by Jerry McClain
Fishery Biologist*

On October 26-27, 2004 Service staff met with Ohio Department of Natural Resources Division of Wildlife (ODOW) staff to discuss fish passage opportunities in Ohio. The primary focus of the discussion was removal of the Ballville Dam on the Sandusky River which remains the top priority for ODOW. Removal of this dam would provide access to critical habitat and greatly enhance ODOW's management efforts for Lake Erie walleye. The Service will continue to work with ODOW in pursuit of funding opportunities to address this critical project. Although Ballville Dam will remain the focus of collaborative efforts to

secure fish passage funding in Ohio watersheds, smaller projects will also be identified and entered into the Service's Fisheries Operational Needs System (FONS).

Service staff participating in the meeting included Alpena FRO Project Leader McClain, Assistant Regional Director Gerry Jackson, Regional Fish Passage Coordinator Mike Hoff and Cartersville FRO Project Leader Rob Simmonds. McClain will remain the primary point of contact for fish passage projects in the Lake Erie watershed and for collaborative efforts regarding the Ballville Dam.

Improving fish passage to critical habitat in the Sandusky River in Ohio will provide significant benefit to Ohio's fishery management efforts for Lake Erie walleye. Coordination meetings and collaborative efforts such as the one discussed here are consistent with "Partnerships and Accountability", "Aquatic Species Conservation and Management" and "Aquatic Habitat Conservation and Management" priorities of the Service's Fisheries Vision for the Future.

Service Biologist Contacts Huron Commercial Fishers



*Submitted by Adam Kowalski
Fish and Wildlife Biologist*

During the month of November 2004, Fishery Biologist Adam Kowalski sent out a request for data from the commercial fishers in Lake Huron in preparation for updating the Alpena FRO Commercial Fishery Sturgeon Project annual report with data through 2004. Participating commercial fishers tag incidentally caught lake sturgeon and

record data such as tag number, total length, fork length, girth, water depth, water temperature, bottom type, and capture location from lake sturgeon caught in trap nets targeting lake whitefish and yellow perch. Fishers also remove the first pectoral fin ray for ageing purposes. Previously tagged sturgeon are released upon recapture, and all above listed data are noted. Kowalski will do follow up phone calls if data is not received by January 2005.

Since 1995 when the project started, commercial fishers in US waters have tagged 301 lake sturgeon in the main basin of Lake Huron. Forty-nine tagged lake sturgeon have been re-captured, and an additional 31 sturgeon have been captured, measured, and released untagged. All project data are stored at the Alpena FRO and are used to help track lake sturgeon movement in the Great Lakes and to monitor lake sturgeon recovery. This project will continue in 2005, and copies of the current year's report will be available on the Alpena FRO website located at <http://www.fws.gov/midwest/alpena>. In addition, this year all commercial tag information will be entered into the Great Lakes Basin Lake Sturgeon Tagging Database that is currently being developed by Biologist Kowalski. This database will help biologists track the movement of lake sturgeon throughout Lake Huron and the Great Lakes basin over the course of the project by providing agency contact information for each tagged lake sturgeon currently at large in the Great Lakes.

All commercial fishers in this program are volunteers working toward a common goal of rebuilding this native population before it requires listing under the Endangered Species Act. This outcome is consistent with the Service's goal of building and maintaining self-sustaining populations of native fish species under the "Aquatic Species Conservation and Management" priority of the Fisheries Program Vision for the Future. The multi-partner nature of this work is also consistent with the Service's goal of establishing and maintaining open, interactive communication with its partner agencies under the "Partnerships and Accountability" priority of the Fisheries Program Vision for the Future.

Lake Sturgeon Research Presented to DOW Chemical

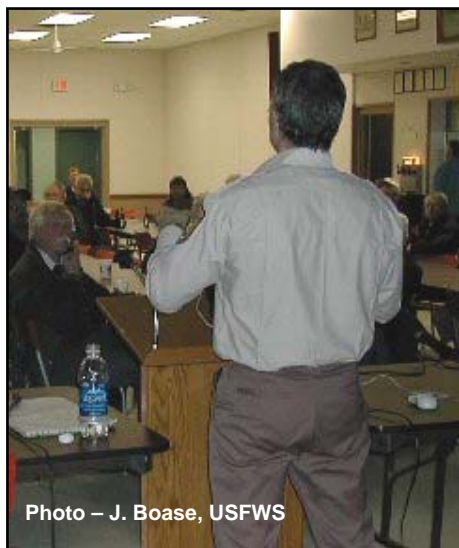


Photo – J. Boase, USFWS

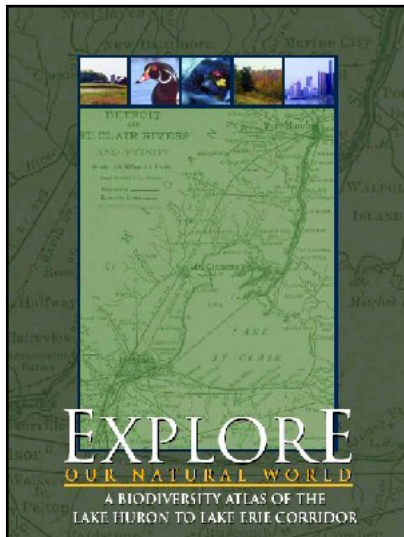
*Submitted by James Boase
Fishery Biologist*

Fishery Biologist James Boase traveled to the DOW Chemical Facility in Midland, Michigan on December 15, 2004 to present information on upcoming lake sturgeon research that will be taking place in the Saginaw River Watershed. Research is scheduled to begin in spring of 2005 and continue through summer 2007. The primary goal of the research project is to determine if a remnant population of lake sturgeon exists in the Saginaw River Watershed and if so determine what habitats they are using for spawning. In 2005 two sites in the watershed will be surveyed, one on the Tittabawassee River below the DOW Dam and the other on the Cass River below the Frankenmuth Dam.

Approximately 25 biologists and interested employees from DOW attended the presentation. The informal presentation provided an overview of the scheduled work and provided an opportunity for the audience to ask questions and provide comments about the research. Questions focused on how efforts to rehabilitate lake sturgeon integrates with the Fish Community Objectives for Lake Huron, how the research would benefit other game species, and what other lake sturgeon habitat would be available if the DOW Dam was removed. The forum was an excellent opportunity for Boase to explain how Alpena FRO is working with biologists from State and Federal agencies along with non-governmental organizations in an effort to better understand and enhance sturgeon populations throughout the Great Lakes.

This presentation provided an excellent opportunity to explain to the public the Service's mission and its effort to restore native fish and control exotic species and supports the "Partnerships and Accountability", "Aquatic Species Conservation and Management" priorities of the Fisheries Program Vision for the Future. Specifically, the presentation focused on efforts to identify the remaining lake sturgeon spawning habitat associated with tributaries connected to Lake Huron. The benefits of native species restoration and the detriments of exotic species were clearly defined and explained. The presentation was also an excellent outreach opportunity.

New Book Available About the Huron Erie Corridor



*Submitted by James Boase
Fishery Biologist*

Fishery Biologist James Boase was invited to attend the release of the first publication of the book titled Explore Our Natural World: A Biodiversity Atlas of the Lake Huron to Lake Erie Corridor (currently available on-line at the U.S. EPA website <http://www.epa.gov/glnpo/ecopage/stclairbiodiv/>). The open house was sponsored by DTE Energy and the U.S. EPA on December 14, 2004 at the DTE Energy Building in Detroit Michigan. Approximately 100 people attended the open house including local officials from the U.S., Canada, and Walpole Island First Nation along with local media organizations.

Some of the most sensitive areas highlighted in the Atlas are areas now found within the boundaries of the Detroit River International Wildlife Refuge. The forum was an excellent opportunity to explain the Service's role in helping manage the diverse natural resources found within the Corridor and the importance of this area to the Great Lakes ecosystem.

This open house provided an excellent opportunity to interact with local officials and biologists from other agencies and to explain the Service's mission and efforts to manage resources in the Great Lakes. Specifically, information was provided about the efforts of the Service and its partners to rehabilitate lake sturgeon populations in the Great Lakes and the role that the Fishery Resources Offices have in this endeavor. This outreach event supports the "Partnerships and Accountability" and "Aquatic Species Conservation and Management" priorities of the Fisheries Program Vision for the Future.

Open House Held at Walpole Island

*Submitted by James Boase
Fishery Biologist*

On December 9, 2004 Fishery Biologist James Boase attended an open house on Walpole Island, Ontario. The open house was held at the Heritage Center and was attended by approximately 75 people, mostly from the local community. The purpose of the meeting was to meet some of the governing members of the Walpole Island First Nation, research biologists from the island, and researchers from Environment Canada to discuss common fishery and aquatic resource issues. Current research on the island is focused on native mussel recovery efforts taking place on the St. Clair Delta. Walpole Island is one of numerous islands that make up the delta and is one of the last locations in the Great Lakes where a relatively healthy population of native mussels still exists. Researchers from Walpole Island First Nation and Environment Canada have been studying what impacts exotic mussels (zebra mussels) are having on the native species. Work has been on going for the last three years and will continue this coming summer. Boase was invited to assist in the research this summer with the hope that future joint projects between the Service, Environment Canada, and Walpole Island First Nation could be established.

This open house provided an excellent opportunity to interact with local officials and biologists from other agencies and to explain the Service's mission and efforts to manage resources in the Great Lakes. Specifically, information was provided about the efforts of the Service and its partners to rehabilitate native mussel populations in the Great Lakes and the role that the Fishery Resources Offices have in this endeavor. This outreach event supports the "Partnerships and Accountability" and "Aquatic Species Conservation and Management" priorities of the Fisheries Program Vision for the Future.

Sturgeon Tagging Database in Progress



*Submitted by Adam Kowalski
Fish and Wildlife Biologist*

During the month of February 2005, Fishery Biologist Adam Kowalski led two conference calls with Service personnel to finalize the structure for a Great Lakes wide lake sturgeon tagging database. In 2004 Kowalski received a grant for \$11,000 from the Great Lakes Fishery Trust to construct and maintain a database to house tag information such as tag type, tag number, tag location, and tagger contact

information. Lake sturgeon are tagged by several resource agencies and universities in research studies and evaluations throughout the Great Lakes. Once finalized and posted on the internet, users will be able to access the database and query out contact information for pit tag and external tag numbers for any tagged lake sturgeon.

To date all existing USFWS data have been entered into the database. We are building a test web site for all other agency and university partners to view before sending out data submission requests. This test web site is scheduled to be working by the end of March 2005.

This database will improve the information sharing process between agencies and the general public who may encounter tagged lake sturgeon. The multi-partner nature of this work is consistent with the Service's goal of establishing and maintaining open, interactive communication with its partner agencies under the "Partnerships and Accountability" priority of the Fisheries Program Vision for the Future.

Review of Lake Huron Double Crested Cormorant Management



*Submitted by Jerry McClain
Fishery Biologist*

Alpena FRO Project Leader McClain participated in a meeting hosted by the Michigan Department of Natural Resources (MDNR) - Alpena Fisheries Research Station on February 24, 2005 to review double crested cormorant management activities that took place in the Les Cheneaux Islands region of northern Lake Huron in 2004.

Consistent with terms of the Service's Public Depredation Order, U.S. Department of Agriculture - Wildlife Services (WS) and MDNR has initiated a program to control cormorant populations near Cedarville, MI where increasing populations have been linked to declines in yellow perch populations. Pete Butchko (WS State Director) summarized the results of control efforts directed in 2004 and discussed possible next steps for areas of concern in Lake Huron.

The Thunder Bay region of Lake Huron was discussed as a site for future cormorant management efforts due to MDNR concerns with possible predation effects on stocked salmonids, lake whitefish and smallmouth bass, as well as habitat concerns for some of the islands in the Thunder Bay area. In addition to McClain, the Service was represented by Steve Kahl, Ed DeVries, and Jim Dastyk from the Shiawassee NWR to provide input on issues related to the islands part of the Michigan Islands NWR in Thunder Bay. Discussion will continue between the agencies as further plans are developed.

Collaboration between federal, state and tribal agencies is essential for effective management of Great Lakes natural resources. Meetings to discuss concerns and evaluate management strategies are critical to maintain partnerships. This effort is consistent with the "Partnerships and Accountability" and "Aquatic Species Conservation and Management" priorities of the Service's Fisheries Program Vision for the Future.

Alpena FRO Travels to DC to Celebrate Habitat



*Submitted by Jerry McClain
Fishery Biologist*

During the week of March 7-11, 2005 Project Leader McClain traveled to Washington, D.C. to participate in a Scaling Up Fisheries event "Celebrating Habitat". In addition to ceremonies involving Regional and Washington Office personnel and friends of the Service, Fisheries personnel scheduled a number of meetings with members of Congress and/or staff to provide updates on Service activities in support of the nation's aquatic resources.

In preparation for the week McClain had contacted and scheduled meetings with the offices of Congressman Bart Stupak (M1), Congressman Peter Hoekstra (M2), Congresswoman Candice Miller (M10), and Congressman John Dingell (M15) from Michigan and Senator George Voinovich from Ohio. Michigan project leaders collaborated on the scheduling and participation in meetings for most congressional delegations from the state to share the workload. This approach worked very well and some productive meetings resulted.

McClain followed up the meetings with an email "thank-you" to the congressional staffers for which he had scheduled meetings and reiterated invitations for members of Congress and their Washington office staffers to view on-the-water activities of station staff when they are in the districts.

Outreach events provide an opportunity for the Service to highlight its efforts to conserve, protect and enhance fish, wildlife and plants and their habitats for the continuing benefit of the American people. Although relationships have been established with district staff of Michigan's congressional representatives, this event provided Alpena FRO staff an opportunity to establish relationships with the Washington offices as well. This activity is supportive of the Fisheries Vision for the Future priority of "Partnerships and Accountability".

Invaders of the Great Lakes Seminar Hosted by MSU

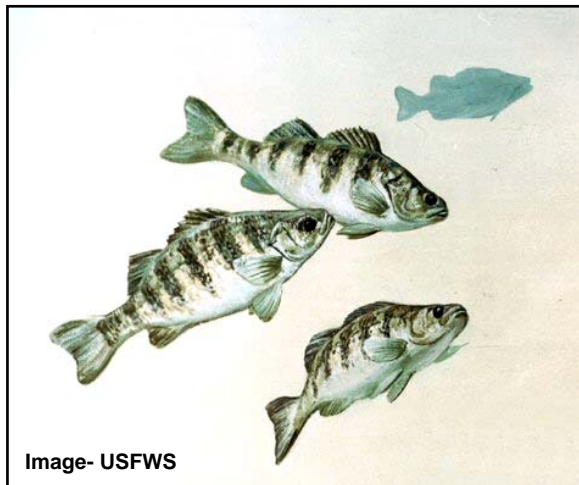
*Submitted by Anjanette Bowen
Fishery Biologist*

Alpena FRO Biologist Anjanette Bowen attended the "Invaders of the Great Lakes: Options for Prevention and Management" seminar held at Michigan State University's Kellogg Center Auditorium in East Lansing, Michigan on March 8, 2005. The seminar was a program of the Agriculture and Natural Resources (ANR) Week at Michigan State University (MSU) and was sponsored by MSU, Michigan Sea Grant, Michigan DEQ, North American Lake Management Society, and the USGS. A variety of university and resource agency speakers provided information on the current state of invasive species within the Great Lakes and technology that is

being developed that may provide control. Other Service representatives that attended the event included Bob Kavetsky and Burr Fisher of the East Lansing Field Office.

The seminar served as a means of communication among researchers working with invasive species and provided useful information consistent with the "Aquatic Species Conservation and Management" and "Partnerships and Accountability" components of the Fisheries Vision for the Future.

Genetics Samples Collected from Yellow Perch for University of Toledo Study



*Submitted by Anjanette Bowen
Fishery Biologist*

During April 2005, Alpena FRO collected genetics samples from yellow perch for research conducted by Dr. Carol Stepien at the University of Toledo. All fish had been captured from Thunder Bay, Lake Huron as by-catch during spring efforts to remove Eurasian ruffe from the Thunder Bay River with small mesh gillnets. A portion of the pectoral fin was removed and preserved in alcohol for the genetic analysis, and biological data including length, sex, and capture location were recorded.

Dr. Stepien is collecting genetics samples from native yellow perch and walleye in each of the Great Lakes and will be using the samples to develop a high-resolution, low cost DNA data base for analyzing fish stock structure in the Great Lakes. The study is funded by Sea Grant.

Partnerships are a key component of the Service's mission to conserve and protect fish and wildlife and their habitats for the continuing benefit of the American people. It is necessary to learn about native and invasive species to be able to provide for their management. This effort addresses the "Partnerships and Accountability" and "Aquatic Species Conservation and Management" components of the Fishery Program's Vision for the Future.

Alpena FRO Assists with Coast Guard Training Exercises



*Submitted by Scott Koproski
Fishery Biologist*

On May 20, 2005 Fishery Biologists Scott Koproski and Aaron Woldt assisted in training activities of the U.S. Coast Guard – Alpena Station. Chief Petty Officer (CPO) Brad Adams asked Alpena FRO to provide a crew and vessel to assist in performing search and rescue drills for guardsman

temporarily assigned to the Alpena Station. Each year the Coast Guard has additional guardsman assigned to the station to protect the boating community in the Alpena area. The Alpena Station is the only post between St. Ignace and Tawas, MI on Lake Huron. They execute over 50 search and rescues annually and this post is vital in keeping the boating community safe in northern Lake Huron.

Fishery Biologists Koproski and Woldt took a vessel on Thunder Bay, Lake Huron and posed as a vessel in distress for the exercises. Radio communication took place between the Alpena Station base, the Alpena Station vessel, and Alpena FRO's vessel during the training. A variety of towing exercises were performed and a number of emergency situations were presented by Koproski and Woldt to the Alpena Station guardsman. Each exercise was representative of search and rescue operations that the Alpena Station deals with annually. Without the help of the Alpena FRO staff and vessel the Alpena Station may not be adequately prepared for the 2005 boating season.

The assistance provided by Alpena FRO staff for the training exercise is another example of coordination between federal agencies and is consistent with the Service's Fisheries Program Vision for the Future for "Partnerships and Accountability".

Appreciation Dinner

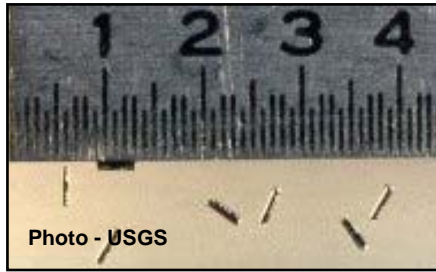
*Submitted by Adam Kowalski
Fish and Wildlife Biologist*

During May 2005, Fishery Biologist Adam Kowalski started preparing for the 8th Annual Commercial Fishers Appreciation Dinner. The Alpena FRO annually hosts this dinner for Michigan state-licensed and tribal commercial fishers that assist the Service with lake sturgeon work in Lake Huron. Kowalski reserved a city park to hold the dinner, hired a caterer, and ordered prizes and gifts such as life vests, rain gear, t-shirts, and coffee mugs. All items were purchased with volunteer funds.

Commercial fishers encounter lake sturgeon as by-catch during normal fishing operations for lake whitefish, yellow perch, and channel catfish. The fishers volunteer time by tagging and collecting biological information on lake sturgeon by-catch. Currently, 12 commercial fishers operating 19 boats participate in the study. Approximately 411 lake sturgeon have been tagged since the program began in 1995.

This partnership between the Service and Lake Huron commercial fishers to track and monitor lake sturgeon has been in place since 1995, and is consistent with the "Partnerships and Accountability" priority of the Fisheries Program Vision for the Future to develop and improve long-term partnerships.

CWTs Removed from MDNR Lake Trout



*Submitted by Adam Kowalski
Fish and Wildlife Biologist*

During the last week of June 2005, Fishery Biologists Adam Kowalski and Scott Koproski extracted and read coded-wire-tags (CWT's) from lake trout for Michigan DNR. CWT's are microscopic metal tags placed in the snouts of juvenile lake trout at the hatchery. Hatchery personnel then remove the fish's adipose fin so that tagged lake trout can be identified

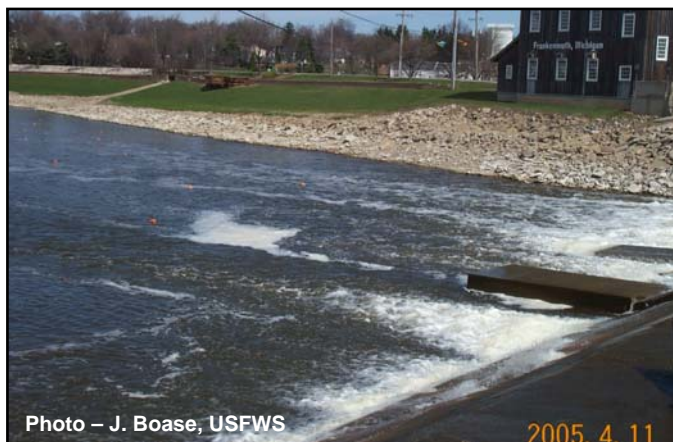
by anglers and researchers. Lake trout heads were collected during the Marquette Fishery Research Station's 2004 Lake Superior lake trout surveys.

CWT's are extracted by cutting lake trout snouts into smaller and smaller pieces until the tag can be seen and removed. A metal detector is used to help the extractor find tags. CWT's are read under a microscope, and each tag's unique number is recorded. The tag number, when compared to stocking records, yields information such as stocking location, stocking date, fish age, fish strain, and hatchery of origin.

In total, Kowalski removed and read 98 tags from 102 lake trout heads. Not all adipose clipped lake trout contain CWT's, because some lake trout shed their tag and some are erroneously fin clipped.

Information from these tagged fish will be used by MDNR to monitor Lake Superior lake trout populations and to update annual catch-at-age models used to set safe harvest limits in 1836 Treaty waters. These outcomes are consistent with The Aquatic Species Conservation and Management and Partnerships and Accountability priorities of the services Fisheries Program Vision for the Future.

Lake Sturgeon Research Presented to Saginaw Bay Watershed Initiative Network



*Submitted by James Boase
Fishery Biologist*

Fishery Biologist James Boase traveled to Bay City, Michigan on June 3, 2005 to present the preliminary results from the first year of research on the Saginaw River Watershed. The annual meeting sponsored by WIN provides an opportunity for recipients of funding to present their research to the board members as well as interested citizens and business members from the local

community. Approximately 50 people were in attendance at the meeting.

Information was presented using Power Point and lasted for 45 minutes. Preliminary findings from the spring sampling indicated that lake sturgeon were present at two locations during the spring sampling period. One fish was located on the Tittabawassee River below DOW Dam while a second individual lake sturgeon was sighted below the Chesaning Dam on the Shiawassee River. Egg mats placed in the Tittabawassee River below DOW Dam failed to detect the presence of eggs, we therefore concluded that the fish sighted below the dam was just one individual. No egg mats were placed in the Shiawassee River because preliminary examination of that portion of the watershed in the fall of 2004 suggested that the available habitat would not be suitable for spawning, consequently we decided to focus our efforts on the Cass River. Research in 2006 will focus on the Cass, Tittabawassee, and Shiawassee rivers. Our primary goal is to either collect genetic information from the lake sturgeon that are occasionally migrating up the watershed to spawn and to compare it with the genetic information from other known populations around the Great Lakes. Obtaining genetic information about the Saginaw River lake sturgeon is essential for future management decisions and will be key in determining the next step.

Following the presentation questions were answered for approximately 20 minutes. Questions focused on how efforts to rehabilitation lake sturgeon integrates with the Fish Community Objectives for Lake Huron, how the research would benefit other game species, and what other lake sturgeon habitat would be available if the DOW Dam was removed. Specific questions were addressed about what steps will be necessary to rehabilitate lake sturgeon in the watershed following the results of the current research. The forum was an excellent opportunity for Boase to explain how Alpena FRO is working closely with biologists from other State and Federal agencies along with non-governmental organizations to better understand and enhance sturgeon populations throughout the Great Lakes.

This presentation provided an excellent opportunity to explain to the public the Service's mission and its effort to restore native fish and control exotic species. Specifically, the presentation focused on efforts to identify the remaining lake sturgeon spawning habitat associated with tributaries connected to Lake Huron. The benefits of native species restoration, and the detriments of exotic species were clearly defined and explained. The presentation was also an excellent outreach opportunity. This project is consistent with the Partnerships and Accountability, Aquatic Species Conservation and Management, and Leadership in Science and Technology focus areas of the Fisheries Program's Vision for the Future.

Lake Huron Technical Committee Meets in Sault Ste. Marie, Ontario



*Submitted by Jerry McClain
Fishery Biologist*

Alpena FRO staff traveled to Sault Ste. Marie, Ontario on July 19, 2005 to participate in the summer meeting of the Lake Huron Technical Committee (LHTC). Project leader McClain attended the meeting on the 19th and 20th and participated in discussions relating to lake trout rehabilitation and preparations for writing the latest State of Lake Huron report and preparing for the State of Lake Huron

Conference which will be held in the spring of 2006. McClain will be writing the Invasive Species section of the report and providing an oral presentation at the conference. An outline of the report was provided to the LHTC for comment.

Fishery Biologist Bowen attended the meeting on July 19th to provide an update from the St. Marys River Fishery Task Group (SMRFTG) which she co-chairs and to participate in discussions relating to the Walleye Stocking proposal developed by the SMRFTG. Similarly, Biologist Boase attended the July 19th session of the meeting to provide an update on lake sturgeon management activities and lead discussion on the possible establishment of a Lake Sturgeon Task Group for the LHTC. The LHTC has agreed to establish a Lake Sturgeon Task Group and Boase will serve as the initial chair of the group. Charges for this task group will be developed by the Lake Huron Committee and passed through the LHTC. Fishery Biologist Woldt attended the final day of the meeting on July 21 to participate in discussions relating to research priorities of the LHTC.

Participation in interagency committees such as the Lake Huron Technical Committee is critical for visibility of Service Fishery programs and for meeting our responsibilities for Great Lakes fisheries management. This activity is consistent with the Partnerships and Accountability, Aquatic Species Conservation and Management, Aquatic Invasive Species and Leadership in Science and Technology priorities of the Service's Fishery Program Vision for the Future.

Commercial Fishers Appreciation Dinner



*Submitted by Adam Kowalski
Fish and Wildlife Biologist*

On July 23, 2005, Fishery Biologist Adam Kowalski traveled to Bay City, MI to attend the 8th Annual Commercial Fishers

Appreciation Dinner. The Alpena FRO hosts the dinner for Michigan state-licensed and tribal commercial fishers that assist the Service with lake sturgeon work in Lake Huron. These fishers encounter lake sturgeon as by-catch during normal fishing operations and volunteer their time to tag and collect biological information on captured lake sturgeon. Currently, 15 commercial fishers operating 21 boats participate in the study. Approximately 411 lake sturgeon have been tagged and released since the program began in 1995. Certificates of appreciation, coffee mugs, and embroidered shirts were presented to each of the fishers present at the dinner. Approximately 30 individuals representing all participating fishery companies were present at the picnic style pork dinner.

The Commercial Fishers Appreciation Dinner recognizes a long standing partnership between the Service and Lake Huron commercial fishers to track lake sturgeon movement. This outcome is consistent with the "Partnerships and Accountability" priority of the Fisheries Program Vision for the Future to develop and improve long-term partnerships.

Pine River Nature Center Newsletter Highlights Lake Sturgeon Presentation



*Submitted by James Boase
Fishery Biologist*

Research conducted by staff at the Alpena FRO was highlighted in the Summer 2005 issue of the Pine River

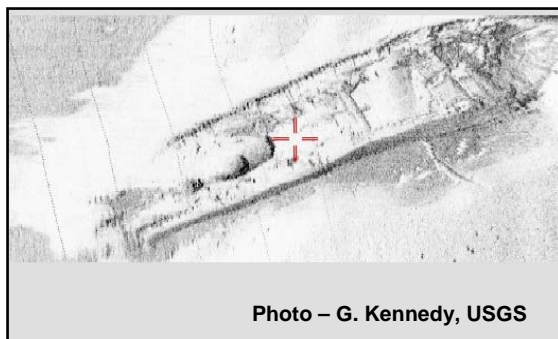
Nature Center Newsletter (<http://www.sccresa.org/prnc/newsletters.html>). During the spring of 2005 Fishery Biologist James Boase traveled to the Center to answer questions about the ongoing research taking place in the St. Clair River and to present a 45 minute Power Point Presentation about the subject, portions of the meeting were highlighted in the article.

The Center which was recently open to the public in 2003 is situated on the Pine River a tributary of the St. Clair River. The purpose of the Center was to provide an outdoor facility for teaching. The Center is run by the St. Clair County Intermediate School District which integrates the outdoor facility at the Center with its classroom and textbook science curriculum for its K - 12 students. The Center routinely invites natural resource specialists to come and give presentation or run workshops for the benefit of the students, teachers and local citizens.

The article highlights the importance of the St. Clair River for lake sturgeon survival in the Great Lakes. Forums like these reach a wide audience and are excellent opportunities to explain how Alpena FRO is working closely with young students, teachers, and local citizens to identify their responsibilities as stewards of our natural resources.

This highlighted article provided an excellent opportunity to showcase the Service's mission and its effort to restore native fish. Specifically, the article focused on the importance of the St. Clair River and the survival of lake sturgeon in that area of the Great Lakes. This project is consistent with the Partnerships and Accountability, Aquatic Species Conservation and Management, and Leadership in Science and Technology focus areas of the Fisheries Program's Vision for the Future.

More Shipwrecks found During Side-Scan Sonar Work in the North Channel of the St. Clair River



*Submitted by James Boase
Fishery Biologist*

While mapping the North Channel of the St. Clair River, Biologist from Alpena FRO and USGS Great Lakes Science Center (GLSC) in Ann Arbor Michigan discovered a Great Lakes shipwreck. The side-scan research taking place in the North Channel during the summer of 2005 is part of a collaborative effort between Alpena FRO and its

partners to better understand the habitat needs of lake sturgeon in the Great Lakes.

Since 1996 Alpena FRO, GLSC, Michigan DNR Lake St. Clair Research Station, Ontario Ministry of Natural Resources, and a number of non-governmental organizations have conducted a number of lake sturgeon research projects in the waterways connecting lakes Huron and Erie. During that time period information derived from mark-recapture and telemetry studies have indicated that the North Channel provides some yet identified habitat component that is important for lake sturgeon survival. In the headwaters region of the St. Clair River shipwrecks were identified as important refuge areas for spawning sturgeon providing breaks in the water current.

In 2004 Alpena FRO and its partners completed a lake sturgeon telemetry project studying the movement patterns of juvenile (less than 30") lake sturgeon in the North Channel. Preliminary results from the side-scan mapping indicate that the location where the shipwreck was recently discovered falls within the home range of a number of the fish studied in 2004. Although the discovery of the shipwreck is an important piece of the research puzzle our primary goal is to map the entire North Channel and define all of the habitat differences within the channel. What is not fully understood about the population of lake sturgeon that remain in the North Channel year round is what foods are available, and seasonal and diel habitat preferences.

After nearly a decade of research conducting telemetry and mark-recapture studies no lake sturgeon have been found in waters less than 25 feet in the St. Clair River. Interestingly, the most diverse and productive invertebrate populations are found in the shallowest areas of the river and yet lake sturgeon have never been documented as using those areas of the river. Preliminary results of the side-scan work indicate that lake sturgeon of all sizes are found over sand or hard-pan clay habitats in the North Channel. Completion of this project should help clarify important habitats needed for the survival of lake sturgeon in this part of the Great Lakes.

This joint research project provided an excellent opportunity to interact with biologists from other agencies and to explain the Service's mission and efforts to manage fishery resources in the Great Lakes. Specifically, information was provided about the efforts of the Service and its partners to rehabilitate native lake sturgeon populations in the Great Lakes and the role that the Fishery Resources Offices have in this endeavor. This research event supports the "Partnerships and Accountability" and "Aquatic Species Conservation and Management" priorities of the Fishery Program's Vision for the Future.

Local Anglers Assist with Lake Sturgeon Diet Study

*Submitted by James Boase
Fishery Biologist*

Using funding from DTE Energy, Biologists from Alpena FRO and Michigan DNR Lake St. Clair Research Station teamed up to study the diet of lake sturgeon captured in the North Channel of the St. Clair River. The study was designed as a pilot project to help researchers get a better understanding of what foods make up lake sturgeon diet in this system. Although many lake sturgeon have been collected in the St. Clair River, to date no diet information had been collected.



Photo - J. Boase, USFWS

2005. 7. 3

What biologists have been able to piece together from recent research is that lake sturgeon reside in the St. Clair River year round and the areas of the river that they occupy are composed primarily of sand and hard-pan clay. Collection of benthic samples in those same areas revealed that very few aquatic organisms live there with the exception of zebra mussels. Lake sturgeon are considered opportunistic feeders meaning that they will consume a wide variety of diet items. The purpose of this pilot project was to determine if lake sturgeon were taking advantage of the abundance of zebra mussels found in the system.

In the past lake sturgeon were captured in the St. Clair River on setlines that were fished over a 24 hour period. No diet information could be collected from those fish because during that 24 hour period most of the food items get digested. To avoid those problems this study solicited the help of local recreational anglers to capture lake sturgeon using hook and line and as soon as a fish was landed researchers were on hand to pump the stomach and collect diet information.

The study was originally proposed to take place over two weekends during the month of July. The first date was scheduled on July 16th, the opening day of lake sturgeon fishing for Michigan waters, but was canceled due to foul weather. The second weekend was July 29th and 30th, with six boats fishing each evening. A total of seven lake sturgeon were collected during the two nights of fishing with the fish ranging in size from 28 to 53 inches.

The six boats helping with the study were fishing at various locations along the ten mile length of the North Channel. When a fish was hooked and landed the boat captains would notify the research boat for transfer of the fish. Once the fish was transferred to the research boat information about the fish was collected including; length, weight, girth, fin ray (for age and genetics), and then the fish would get tagged with both an internal and an external marker. Diet information was obtained by first placing the fish in a large plastic tub, inserting a small pliable plastic hose down the gullet of the fish and flushing the stomach contents with water.

All anglers participating in the project received specialty ball-caps made up for the event. The event was covered by the media with articles appearing in various local news papers (<http://www.mlive.com/sports/statewide/index.ssf?/base/sports-0/112423020764270.xml&coll=1>) during the month of August. Following the event participants were asked to participate in the Michigan DNR Angler Diary Program. The Diary Program is an effective tool used by the Michigan DNR to collect information that should provide valuable insight about lake sturgeon residing in the North Channel.

This joint research project provided an excellent opportunity to interact with biologists from other agencies and to explain the Service's mission and efforts to manage resources in the Great Lakes. Specifically, information was provided about the efforts of the Service and its partners to rehabilitate native lake sturgeon populations in the Great Lakes and the role that the Fishery Resources Offices have in this endeavor. This research event supports the "Partnerships and

Accountability” and “Aquatic Species Conservation and Management” priorities of the Fishery Program’s Vision for the Future.

New Sampling Gear Used to Collect Lake Sturgeon in the St. Clair River



Photo – B. Mannv.

*Submitted by James Boase
Fishery Biologist*

With funding provided by DTE Energy, Biologists from Alpena FRO and Michigan DNR Lake St. Clair Research Station purchased and tested trammel nets in the St. Clair River. Trammel nets have been successfully used by commercial fishers and biologists in large rivers like the Mississippi and Missouri. They have been used for many years to capture, virtually unharmed, a wide variety of species and sizes of fish.

Trammel nets can best be described as a small mesh gill net sandwiched between two large mesh gill nets. However, unlike gill nets trammel nets do not typically gill the fish instead the fish get caught in a pocket that is formed by the smaller inner mesh as they try to swim through. The

trammel nets we used had a one inch inner mesh surrounded by eight inch outer panels. The nets can be fished in a number of ways such as anchoring or allowing the nets to drift with the current. Researchers on the large rivers have had the best results by drift fishing the nets along river bottoms. One of the hazards fishing the nets in that fashion is that they are prone to snagging debris along the river bottom.

The goal of this demonstration effort was to collect juvenile lake sturgeon that were less than three years old. During the past decade efforts to collect young sturgeon in the St. Clair River have utilized setlines with smaller hooks. After nine years of sampling less than 25 juvenile lake sturgeon have been captured with no young-of-year lake sturgeon captured.

Our first attempt at sampling using the trammel nets focused on areas where juvenile lake sturgeon have been captured in the past. After a day of sampling and approximately 15 attempted transects we managed to capture only one large lake sturgeon. Some of our results can be explained by the number of snags that were encountered. The longest distance that the nets traveled before hooking a snag was only 200 meters and in approximately half of the transects we encountered large numbers of zebra mussels which resulted in fouled nets. Another possible explanation may be a function of the clarity of the water. The North Channel of the St. Clair River has a higher relative clarity than would be expected in systems like the Mississippi or Missouri Rivers and as a result the fish may simply be swimming away from the nets to avoid them.

In August researchers from Alpena FRO and USGS Great Lakes Science Center (GLSC) were able to use Side-scan sonar to map the North Channel. That information has provided some insight on the best locations where the nets can be deployed with minimal chances of getting snagged. Our future efforts will focus on those locations of the river.

This sampling effort allowed researchers from various agencies to share information about different sampling techniques. Our goal is to continue working with our partners from the GLSC, Michigan DNR, along with corporate sponsors, we plan to continue to test new sampling techniques in our effort to better understand the basic habitat needs of lake sturgeon in this system.

This joint research project provided an excellent opportunity to interact with biologists from other agencies and to explain the Service's mission and efforts to manage resources in the Great Lakes. Specifically, information was provided about the efforts of the Service and its partners to rehabilitate native lake sturgeon populations in the Great Lakes and the role that the Fishery Resources Offices have in this endeavor. This research event supports the "Partnerships and Accountability" and "Aquatic Species Conservation and Management" priorities of the Fishery Program's Vision for the Future.

Service Tours Lake Huron Shoreline Property Being Considered for Preservation

*Submitted by Jerry McClain
Fishery Biologist*

Alpena FRO Project Leader McClain participated in an August 10, 2005 tour of a 680 acre tract of land bordering Lake Huron's Thunder Bay. The tour was sponsored by the property owner and included invited participation from federal, state, local and NGO parties with potential interest in purchase for conservation. Also participating in the tour were representatives from NOAA's Thunder Bay National Marine Sanctuary, Michigan DNR, Michigan DEQ, The Nature Conservancy, National Audubon Society, Alpena County and Alpena Township, as well as District Aid for U.S Senator Carl Levin and staff from local State Representative Matt Gillard's office.

With the exception of the shoreline habitat, most of the property is densely forested with limited access or development. No survey of the flora and fauna has been completed as the property has been closed to all but private hunting access. Follow-up discussion will take place between the State of Michigan and The Nature Conservancy who showed some interest in acquiring the property for preservation.

Participation in multi-jurisdictional planning events such as this are important to promote the Service's natural resource conservation interests and efforts. This activity is consistent with and supportive of the "Partnerships and Accountability" and "Aquatic Habitat Conservation and Management" priorities of the Service's Fishery Program Vision for the Future.

DTE Energy Hosts Dinner Party at Purdy Fisheries



*Submitted by James Boase
Fishery Biologist*

Lake sturgeon research was highlighted at a dinner party sponsored by DTE Energy and hosted by Purdy Fisheries. The dinner was held on August 23, 2005 in Point Edward Ontario near the site of one of the largest lake sturgeon spawning grounds in the Great Lakes. Approximately 50 employees and their families from DTE Energy attended the dinner. Fishery Biologists James

Boase from Alpena FRO and Bruce Manny from USGS Great Lakes Science Center (GLSC) were guest speakers at the dinner.

The Purdy facility has multiple venues for viewing live lake sturgeon. The outdoor dining area is situated along the banks of the St. Clair River. Within the dining area is a 12,000 gallon aquarium that houses representatives of the local fish community including lake sturgeon. While guests were treated to fresh caught lake trout, walleye and perch for dinner, Boase and Manny presented information about current and past sturgeon research taking place in the St. Clair River. Following dinner guests were taken to the fish raceways housed within the Purdy facility for an opportunity to handle live lake sturgeon. For most guests this was the highlight of the evening.

Alpena FRO, GLSC, Michigan DNR, and DTE Energy have collaborated on a number of pilot projects including telemetry projects in Lake St. Clair, the Detroit River and southern Lake Huron. Findings from those pilot projects led to similar larger studies that ultimately led to the discovery of three lake sturgeon spawning sites in the St. Clair and Detroit rivers. In 2005 DTE funded two new pilot projects, one project is seeking to understand the diet of resident lake sturgeon in the North Channel of the St. Clair River while another project is directed at finding young-of-year lake sturgeon. This event provided an excellent opportunity for Alpena FRO to highlight the continued spirit of cooperation between the Service and its partners towards the rehabilitation of lake sturgeon in the Great Lakes.

This event provided an opportunity to interact with biologists from other agencies and to explain the Service's mission and efforts to manage resources in the Great Lakes. Specifically, information was provided about the efforts of the Service and its partners to rehabilitate native lake sturgeon populations in the Great Lakes and the role that the Fishery Resources Offices have in this endeavor. This research event supports the "Partnerships and Accountability" and "Aquatic Species Conservation and Management" priorities of the Fishery Program's Vision for the Future.

Eurasian Ruffe Genetics Samples Collected for The University of Toledo



*Submitted by Anjanette Bowen
Fishery Biologist*

Alpena FRO collected genetics samples from invasive Eurasian ruffe (ruffe) for a study being conducted by Dr. Carol Stepien at The University of Toledo in Ohio. Dr. Stepien is studying the genetic diversity between invasive species captured from the Great Lakes and their Eurasian source populations in an effort to provide a diagnostic tool for invasive species risk assessment.

Alpena FRO removed pectoral fins from frozen ruffe collected in past years. Genetic information will be extracted from the fins. DNA sequences from this Great Lakes population will be compared to DNA sequences from native populations. The genetic variability will be used to determine risk assessment.

This project is consistent with the "Partnerships and Accountability" and "Aquatic Species Conservation and Management" priorities of the Fishery Program's Vision for the Future.

The **Alpena Fishery Resources Office (FRO)** is located in Alpena, Michigan and works to meet U.S. Fish and Wildlife Service Fishery and Ecosystem goals within Lake Huron, Western Lake Erie, and connecting waters of the St. Marys River, St. Clair River, and Detroit River. Activities include Aquatic Species Conservation and Management, Aquatic Habitat Conservation and Management, Cooperation with Native Americans, Leadership in Science and Technology, Partnerships and Accountability, Public Use, and Workforce Management – all of which are conducted in alignment with the Service Fisheries Program Vision for the Future. The station is one of many field offices located within Region 3, the Great Lakes Big Rivers Region.



**Alpena FRO Accomplishment Report
FY 2005**

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For more information on Alpena FRO programs and activities or to view other station reports visit our website located at
<http://www.fws.gov/midwest/alpena/>.